



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/811,388	03/20/2001	Takehiro Morishige	520.39903X00	4092

24956 7590 06/30/2005

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.
1800 DIAGONAL ROAD
SUITE 370
ALEXANDRIA, VA 22314

EXAMINER

NGUYEN, TRONG NHAN P

ART UNIT	PAPER NUMBER
----------	--------------

2152

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

7

Office Action Summary

Application No.

09/811,388

Applicant(s)

MORISHIGE ET AL.

Examiner

Jack P. Nguyen

Art Unit

2152

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This action is in response to Applicant's amendment filed on 12/28/04. Claims 1-13 are pending.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Ramasubramani et al, 6,507,589 (Ramasubramani hereafter).

As per claims 1, 8, and 10, Ramasubramani teaches an information providing method on a communication network including a server (218, fig. 2) for providing information service, a gateway (214, fig. 2) apparatus and a mobile packet communication network accommodating a mobile terminal (202, fig. 2) and including a service management node 'SMN' (208, fig. 2; SMN is a component of wireless carrier network 'CN' that establishes wireless communications between mobile devices and the network) for managing visit location information of the mobile terminal in the mobile

packet communication network, the gateway apparatus being capable of communicating with said mobile terminal, said server and said service management node, the method comprising the steps of (col. 5, lines 61-66; col. 6, lines 25-29): making a request to set management information from said service management node to said gateway apparatus in an execution process of a procedure for accommodating the mobile terminal to said mobile packet communication network (col. 4, lines 19-30; col. 5, lines 61-66; after the mobile device establishes connection with the carrier network 'CN' via SMN, the CN relays the service requests from the mobile device to the gateway or proxy server (214, fig. 2) for service registering and further processing via the various processes running on the gateway device); registering management information including a service identifier of information service regarding said mobile terminal into a management table by said gateway apparatus in response to reception of said request (col. 4, lines 19-30; upon receiving the service request from the SMN on behalf of the mobile client, the gateway device registers the request that allows the mobile device access to its services); checking whether a service request has been issued to said server with respect to the information service corresponding to the service identifier by said gateway; and making the service request, if the service request has not been issued, by said gateway apparatus to said server to start the information service (col. 6, lines 25-39; upon receiving the service request from the mobile client to access data from the information or application provider (218, fig. 2), the gateway device analyzes the request by parsing the data fields in the request packets to determine where to send or relay (e.g., destination address) the request to a particular

information provider for data service on behalf of the requesting client and returns the response data to the client); packet transferring means for specifying when a packet including service information is received from said server, an address of a mobile terminal, to which information service with said received packet is to be provided, based on said management table and transferring said received packet to said mobile packet communication network by using the address as a destination address (col. 6, lines 25-39; col. 15, lines 16-17, 60-65; upon receiving data response from the information provider, gateway device sends the response data to the mobile device via the wireless carrier network).

As per claim 2, Ramasubramani teaches said service management node requests setting of said management information designating at least an address of said mobile terminal and an identifier of information service to be provided (Col. 15, Lines 25-34), and said gateway apparatus registers said management information including the information designated by said setting request and attribute information regarding said mobile terminal obtained from other server, into said management table (Col. 15, Lines 35-43).

As per claim 3, Ramasubramani teaches when a packet including service information is received from said specific server (Col. 15, Lines 44-45, L50-52), said gateway apparatus refers to said management table and transfers said received packet to said mobile packet communication network by using the address of said mobile terminal registered as a part of the management information as a destination (Col. 15, Lines 54-65).

As per claims 4 and 13, Ramasubramani teaches gateway apparatus has: a first management table for storing, in correspondence with each service identifier, an address of a server operating as a provider of service, a destination address to be attached to a service information packet, and status information indicative of whether a service request has been issued or not (Col. 7, Lines 1-8; Col. 8, Lines 20-35); and a second management table for storing management information regarding said mobile terminal is registered (Col. 16, Lines 59-67 and Col. 17, Lines 1-5), and when a packet including the service information is received from said specific server, said gateway apparatus specifies a service identifier corresponding to said received packet with reference to said first management table, searches said second management table for a management information record including said service identifier to thereby specify an address of a mobile terminal to which said received packet is to be transferred, and transfers said received packet or a duplicate of said received packet to said address (Col. 17, Lines 49-59).

As per claim 5, Ramasubramani teaches a filtering condition is designated in correspondence with a specific service identifier in said first management table (Col. 9, Lines 25-39), and when a packet including service information is received from said specific server, in the case where a filtering condition is designated in correspondence with a service identifier specified in said first management table, said gateway apparatus uses an address of a mobile terminal of which management information satisfies said filtering condition among addresses of mobile terminals specified in said

second management table as a destination of said received packet (Col. 6, Lines 27-33; Col. 8, Lines 66-67; Col. 9, Lines 1-7.)

As per claim 6, Ramasubramani teaches said second management table permits registration of a plurality of service identifiers with respect to a single mobile terminal (Col. 6, Lines 29-33. *A single mobile terminal may have access or subscribe to multiple service providers as illustrated in the examples – email and stock quotes services.*)

As per claim 7, Ramasubramani teaches said gateway apparatus converts a destination address of a packet received from said specific server from a global IP address to a local IP address, and transfers the resultant to said mobile packet communication network (Col. 17, Lines 52-59.)

As per claim 9, Ramasubramani teaches said gateway apparatus registers the management information regarding a mobile terminal into a management table, location information obtained from a location information server (via the wireless network carrier 'CN') for managing geographical local information of each mobile terminal in said mobile packet communication network is registered as a part of the management information into said management table (Col. 4, Lines 19-30; col. 5, lines 61-66; gateway registers mobile clients for data services; the wireless network carrier registers and manages wireless connections between wireless devices and the network; i.e., each CN services and manages its own mobile clients in its geographical location), and when a packet designating a delivery area is received from said server, said gateway apparatus refers to said management table (col. 7, lines 34-37; the gateway configuration table (322, fig. 3) manages services being offered to it plurality of clients (e.g., carrier networks and

mobile clients)) to select an address of a terminal to which said received packet is to be delivered among a group of mobile terminals of which present location is in said designated area, and transfers said received packet to said mobile packet communication network by using said address as a destination address (col. 8, lines 20-35; the gateway device, via its push agent (302,fig. 3), can deliver messages to its subscribing clients in a particular geographic location being managed by the carrier network).

As per claim 11, Ramasubramani teaches a said packet transferring means includes means for receiving a packet including said service information in a multicast packet format from said specific server and transferring the packet in a unicast packet format to a mobile terminal specified by said management table (Col. 6, Lines 11-18).

As per claim 12, Ramasubramani teaches a packet transferring means includes means for converting a destination address of a packet received from said specific server from a global IP address to a private IP address, and transferring the resultant packet to said mobile packet communication network (Col. 17, Lines 39-59; the gateway device, via its routing tables, can perform address translations of its subscribing agents).

Response to Arguments

Applicant's arguments filed on 12/28/04 regarding claims 8-9 have been fully considered but are moot based on new grounds of rejection. Arguments regarding other claims have been fully considered but they are not persuasive.

Point 1: In the remarks, Applicant argues that Ramasubramani does not disclose or suggest, in the amended claims, "...the gateway receives a request from another node to set management information of a mobile terminal."

Examiner traverses applicant's remarks. Ramasubramani does explicitly disclose the mobile client (202, fig. 2) first establishes wireless connection with the network via the wireless carrier network 'CN' (208, fig. 2; CN, via its service management node 'SMN', manages connection between the mobile device and the network; CN receives connection requests from mobile devices for wireless services with the network); after the mobile device establishes connection with the network, the CN relays the service requests from the mobile device to the gateway or proxy server (214, fig. 2) for service registration and further processing via the various processes running on the gateway device (col. 4, lines 19-30; col. 5, lines 61-66).

Point 2: In the remarks, Applicant argues that Ramasubramani does not disclose or suggest, "...the gateway apparatus automatically issues a service request for the information service specified by the service identifier to the server when the service request has not been issued yet."

Examiner traverses the applicant's remarks. Ramasubramani does explicitly disclose upon receiving the service request from the mobile device via the carrier network (or service management node), the gateway device analyzes the request (by

parsing or extracting the data fields within the request packet) and determines where to route or send the request to its intended recipient for information service; i.e., gateway device sends the service request to the content or application server (218, fig. 2) for information services; upon receiving the response from the application server, the gateway device then relays the response data back to the requesting mobile device (col. 6, lines 25-39).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: US Pat 6,295,291; 6,061,346; 5,958,016; 5,867,661; 5,675,507; 5,727,159.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

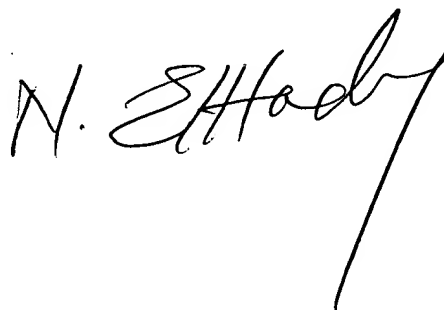
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jack P. Nguyen whose telephone number is (571) 272-3945. The examiner can normally be reached on M-F 8:30-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (571) 272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jpn

A handwritten signature in black ink, appearing to read "N. E. Hadley", with a long, sweeping vertical stroke extending downwards from the end of the signature.